

Amendment Under 37 C.F.R. § 1.116
Serial No.: 10/618,653
SUGHRUE MION, PLLC Ref: Q76188

REMARKS

Claims 1-11 are all the claims pending in the application. By way of review, claims 1-11 are pending in the application. Of these claims, claims 1 and 6-11 are being examined in the subject application; claims 2-5 have been withdrawn as being directed to a non-elected invention.

The Examiner continues to reject claims 1 and 6-11 under § 102(b) as being anticipated by Galloway, et al. (U.S. Patent No. 4,689,597) and by Douglass, et al. (U.S. Patent No. 6,157,287). In addition, the Examiner has entered a new rejection of claims 6-11 under § 102(b) as being anticipated by U.S. Patent No. 6,556,121 (Endo, et al.), commonly assigned to Yazaki Corporation.¹

Beginning with the rejection based on Galloway, et al., in the last response Applicants argued that Galloway, et al. discloses a plurality of fuse elements having a common housing 12. In contrast, as recited in claim 1, each of the fuse elements includes a pair of flat terminal pieces, a fusible part, an insulating housing, and coupling part which couples the flat terminal pieces together. Thus, whereas the present invention allows the individual fuses to be separated from one another by removing the coupling part, this is not the case in Galloway, et al.

Referring to paragraph number 6 of the Office Action, the Examiner responds to this argument. More specifically, the Examiner states as follows:

Regarding Galloway reference, contrary to the Applicant's position, fuse elements can be separated from one another, at least electrically, to be an individual fuse element.

¹ Endo, et al. is prior art under § 102(b) due to its publication date.

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Applicants submit that the Examiner did not address Applicants' argument concerning the fact that the fuse elements in Galloway, et al. include a common housing, whereas the fuse elements of the claimed invention include separate individual housings. Furthermore, the Examiner's comments concerning the ability of the fuse element in Galloway, et al. to be electrically separated from one another is not germane to the issue. Clearly, due to the fact that each fuse element has a separate housing and that the fuse elements are coupled to one another by the coupling part, the individual fuses can be *physically* separated from one another. This is clearly what Applicants were arguing in the last response; Applicants were not focusing on *electrical isolation* between the fuses. It is clear that there is no intention in Galloway, et al. that the fuse elements be physically isolated from one another, as in the present invention.

Turning to the rejection based on Douglass, et al., in the last response, Applicants argued that the DIN rail 14 disclosed in Douglass, et al. is simply not analogous to the claimed coupling part of the present invention. Specifically, according to the present invention, the coupling part is integral to the fuse elements, whereas in Douglass, et al. the individual fuses 10a and 10b can be coupled to housings 12a and 12b which are in turn connected to the DIN rail 14.

Referring to paragraph number 6 of the Office Action, the Examiner contends that the term "integral" as recited in claim 6 broadly covers a construction in which two elements are fastened together or welded together. In other words, the Examiner contends that the term "integral" is not necessarily restricted to a one-piece article.

Although Applicants do not agree with the Examiner, in order to expedite the prosecution, Applicants have amended independent claim 1 to recite that the coupling part is

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unitarily coupled to the flat terminal piece. Similarly, claim 6 has been amended to recite that the coupling part is unitary to the fuses. It is clear that Douglass, et al. does not teach or suggest this aspect of the invention.

As previously argued, there is no teaching or suggestion in Douglass, et al. of an arrangement in which the terminal pieces of a fuse elements are unitarily coupled to a coupling part to make up a fuse belt including a plurality of fuse elements. In Douglass, et al. the DIN rail 14 is not even directly attached to the terminal pieces 38. Rather, the terminal pieces 38 are provided in the fuses 10a and 10b which are then attachable to the dielectric housing 12 which in turn is connected to DIN rail 14.

Finally, with respect to the rejection based on Endo, et al., Applicants respectfully traverse this rejection as well. Endo, et al. discloses a process for manufacturing "separate" fuses. The Examiner relies on Figure 4 of Endo, et al. However, this figure merely shows intermediate stages for manufacturing the separate fuses. Although the terminals 2, central part 40 and fuse element 5 are formed in belt shape, the insulating housings are not mounted on the central part 40 in Figure 4.

With respect to Figure 2, Endo, et al. shows that the housing is mounted on the fuse elements 5 which is separated from the belt-like material 50. Endo, et al. is silent regarding the mounting the insulating housing 4 on the fuse element in the state that the fuse element is coupled to the belt-shaped material 50. In contrast, claim 1 recites a plurality of fuse elements each of which includes a pair of flat terminal pieces interconnected by a fusible part along with an insulating housing which accommodates the fusible part. Further, claim 1 requires a coupling

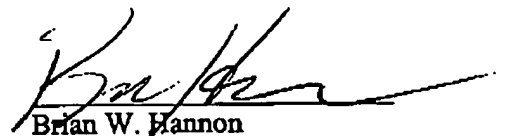
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part to which the terminal pieces of the fuse elements are unitarily coupled. As a result of the "fuse belt" structure, it is possible to handle new fuses as if it were a single belt in a state that each fuse is ready to mount in an electrical junction box or the like. Such an arrangement is not possible or suggested in Endo, et al.

In view of the foregoing, it is respectfully submitted that the claims pending in the application patentably distinguish over the cited art. It is therefore requested that the application be passed to issue at the earliest possible convenience. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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CERTIFICATION OF FACSIMILE TRANSMISSION

Sir:

I hereby certify that the above identified correspondence is being facsimile transmitted to Examiner Anatoly Vortman at the Patent and Trademark Office on June 14, 2005 at (703) 872-9306.

Respectfully submitted,



Brian W. Hannon